In the claims

The following amendments are made with respect to the claims in the international application PCT/DE2003/001822.

This listing of claims will replace all prior versions and listings of claims in this application.

1 (Currently amended). An [[A]]array consisting of oligo- or poly-nucleotide probes applied and immobilized on a surface of a solid substrate, characterized in that sequences of a selection, or all, of the selective monocyte macrophage genes ~~mentioned in the~~ in Tables 1 to 6 are fixed on ~~the~~ said surface.

2 (Currently amended). The [[A]]array according to [[C]claim 1, characterized in that additional further genes are used, ~~if applicable, which~~ wherein said additional genes are known to be expressed in ~~each~~ a cell and to constitute part of the basic genotype of the cell.

3 (Currently amended). The [[A]]array according to ~~Claims 1 and 2~~ claim 1, further characterized in that complementary RNA is bonded on the surface of the array with the aforementioned genes for inverse detection of the ~~genes or gene~~ sequences ~~represented~~ in Tables 1 to 6.

4 (Currently amended). The [[A]]array according to ~~the Claims 1 to 3~~ claim 1, characterized in that the genes, their partial and oligomer sequences are selected genes of

rheumatoid arthritis or other chronic inflammatory diseases, relevant for the disease and side effects, before and after anti-TNF therapy.

5 (Currently amended). The [[A]]array according to ~~the Claims 1 to 4~~ claim 1, characterized in that the genes, their partial and oligomer sequences are genes of the monocyte/macrophage cell system, which are regulated in a manner specific [[of]] to the disease.

6 (Currently amended). The [[A]]array according to ~~the Claims 1 to 5~~ claim 1, further characterized in that~~, if applicable,~~ alleles, derivatives and/or splicing variants of the gene or partial-gene sequences and oligomer sequences are ~~equally~~ present on the surface.

7 (Currently amended). The [[A]]array according to ~~the Claims 1 to 6~~ claim 1, characterized in that it contains gene sequences on the surface, which present a partial sequence identify of at least 80% in the protein-coding mRNA segments.

8 (Currently amended). The [[A]]array according to ~~the Claims 1 to 7~~ claim 1, further characterized in that the surface of the substrate[[s]] is coated with reactive groups, metal compounds or alloys.

9 (Currently amended). The [[A]]array according to ~~the Claims 1 to 8~~ claim 1, further characterized in that the genes or gene sequences are applied in the form of RNA by cDNA spotting techniques, immobilizing techniques and techniques with oligomer synthesis or in an enantiomorphic form.

10 (Currently amended). ~~Application of the array~~ The method according to the [[C]]claim[[s]] 22~~1 to 9 with~~ wherein said method utilizes probes labeled for identification with fluorescence dye, an enzyme, protein or radioactive marker and permitting amplification.

11 (Currently amended). ~~Application of the array~~ The method according to ~~the Claims 1 to 9~~ claim 22, ~~with~~ wherein said method utilizes probes~~, characterized in that the~~ and wherein signals are amplified via coupled alkaline phosphatase, peroxidase, biotin digoxigenin, protein molecules, ~~(precious)~~ metal chelates of beads.

12 (Currently amended). ~~Application of the array~~ The method according to ~~the Claims 1 to 9~~ claim 22, ~~with~~ wherein said method utilizes probes~~, characterized in that~~ and wherein streptavidin, ~~(precious)~~ metal chelates, beads or antibodies are employed for additional amplification of the signals.

13 (Currently amended). ~~Application of the array~~ The method according to ~~the Claims 1 to 9~~ claim 22, for inverse detection of total RNA or messenger RNA fixed to the solid phase.

14 (Currently amended). ~~Application of the array~~ The method according to ~~the Claims 1 to 9~~ claim 22, for measurement of the monocyte/macrophage activation or the inflammatory activity in the blood or in the cell tissue.

15 (Currently amended). ~~Application of the array~~ The method according to ~~the Claims 1 to 9~~ claim 22, for fine diagnosis as well as for early detection of inflammatory diseases and rheumatoid arthritis.

16 (Currently amended). ~~Application of the array~~ The method according to ~~the Claims 1 to 9~~ claim 22, for follow-up of side effects in anti-TNF therapy in cases of inflammatory diseases and rheumatoid arthritis.

17 (Currently amended). ~~Application of the array~~ The method according to ~~the Claims 1 to 9~~ claim 22, for monitoring the therapy and for establishment of a prognosis in cases of inflammatory diseases and rheumatoid arthritis.

18 (Currently amended). ~~Application of the array~~ The method according to ~~the Claims 1 to 9~~ claim 22, for the identification of pharmaceutical targets in cases of inflammatory diseases and rheumatoid arthritis.

19 (Currently amended). ~~Use of the genes or gene sequences according to~~ A method for detecting individual genes wherein said method utilizes a gene or gene sequence from Tables 1 to 6 ~~for methods of detecting individual genes, preferably reverse transcription PCR (RT-PCR)~~.

20 (Original). Use of the genes or gene sequences according to Tables 1 to 6, characterized in that they are provided with labeling or a reporter function.

21 (Currently amended). ~~Use of the genes or gene sequences according to Tables 1 to 6~~ A method for reverse detection of total RNA or messenger RNA bonded to a solid phase in an RNA array, operating on up to 500 tissue and/or blood samples wherein said method utilizes a gene or gene sequence from Tables 1 to 6.

22 (New). A method for the diagnosis or monitoring of a disease condition, including, when desired, monitoring of treatment of the disease, wherein said method comprises contacting a sample with an array consisting of oligo- or poly-nucleotide probes applied and immobilized on a surface of a solid substrate, characterized in that sequences of a selection, or all, of the monocyte macrophage genes in Tables 1 to 6 are fixed on said surface.